PB89-225528

Superfund Record of Decision (EPA Region 6)
South Valley/Edmunds Street, NM.
(Second Remedial Action), June 1988

(U.S.) Environmental Protection Agency, Washington, DC

28 Jun 88

U.S. Department of Commerce
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15. Supplementary Notes

16. Abstract (Limit: 200 words)

The South Valley/Edmunds Street site is a large area in the southern part of the City of Albuquerque, New Mexico, surrounding the municipal water well known as San Jose 6. Within this large area are a number of industrial properties owned and operated by different groups and individuals. This remedial action addresses the Edmunds Street Ground Water operable unit of the South Valley site; the Edmunds Street property is located in the southeastern corner of the site. The focus of this operable unit is the area around the monitoring well SV-10, referred to as the drainage pit area on the Edmunds Street property. This area is the low spot of the property and receives much of the property drainage. Analyses of this area have shown significant levels of industrial solvents in the soil, and a plume of contaminated ground water starting at the drainage pit area and extending to the east. The ground water source will be treated as a sole-source aquifer because there are no alternate sources available to the City of Albuquerque. The contaminated ground water currently poses a direct threat to Albuquerque's water supply by moving toward the city's well fields. The primary contaminants of concern affecting the ground water include VOCs such as PCE and TCE.
(See Attached Sheet)

17. Document Analysis a. Descriptors

Record of Decision
South Valley/Edmunds Street, NM
Second Remedial Action
Contaminated Media: gw
Key Contaminants: VOCs (PCE, TCE)

b. Identifiers/Open-Ended Terms

c. COSATI Field/Group

18. Availability Statement	19. Security Class (This Report) None	21. No. of Pages 47
	20. Security Class (This Page) None	22. Price

(See ANSI-Z39.18) *See Instructions on Reverse*

OPTIONAL FORM 272 (4-77)
(Formerly NTIS-35)
Department of Commerce

EPA/ROD/R06-88/037
South Valley/Edmunds Street, NM
Second Remedial Action

16. ABSTRACT (continued)

The selected remedial action for this site includes: ground water pump and treatment using air stripping (packed tower aeration) with reinjection of the treated water into the aquifer through infiltration galleries; and ground water and air monitoring. The present worth cost for this remedial action is $874,000, with present worth O&M costs estimated at $280,200.

PERFORMANCE STANDARDS OR GOALS: The contaminated ground water will be treated to a PCE level of 20 ug/l as required by the New Mexico Water Quality Control Commission regulations, and to the MCL for TCE of 5 ug/l as required by the Safe Drinking Water Act.

INSTITUTIONAL CONTROLS: Not applicable.

KEYWORDS: Aeration; Air Stripping; Containment; Extraction; Ground Water; Ground Water Monitoring; Ground Water Treatment; MCLs; Onsite Discharge; Onsite Treatment; PCE; Plume Management; Safe Drinking Water Act; Sole-Source Aquifer; State Criteria; TCE; Treatment Technology; VOCs.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION VI
1445 ROSS AVENUE, SUITE 1200
DALLAS, TEXAS 75202

DECLARATION FOR THE RECORD OF DECISION

SITE NAME AND LOCATION

South Valley site, Edmunds Street Groundwater Operable Unit
Albuquerque, New Mexico

STATEMENT OF PURPOSE

This decision document outlines the selected remedial action for the Edmunds Street Groundwater Operable Unit in accordance with the Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA), as amended by the Superfund Amendments and Reauthorization Act of 1986 (SARA), and to the extent practicable, the National Oil and Hazardous Substance Pollution Contingency Plan, 40 CFR Part 300, November 20, 1985.

The State of New Mexico (through the New Mexico Environmental Improvement Division) has been provided an opportunity to comment on the technology and degree of treatment proposed by the Record of Decision.

STATEMENT OF BASIS

This decision is based on the administrative record for the South Valley site, Edmunds Street Groundwater Operable Unit (see Attachment 7). The attached index identifies the items which comprise the administrative record.

DESCRIPTION OF THE REMEDY

Upon review of the information contained in the administrative record, it is EPA's judgement that recovery of the plume of contaminated groundwater moving east from the Edmunds Street property with a well system and the treatment of the recovered water with a packed aeration column appears to best serve both statutory and selection criteria in relation to the other solutions evaluated. The selected remedy would also include monitoring of both groundwater, treated water and ambient air to ensure the effectiveness of the remedy. A detailed description of the remedy and an explanation of how it meets statutory requirements is contained in the attached "Summary of Remedial Alternative Selection." This is only the first operable unit for the Edmunds Street portion of the South Valley site. The selected remedy is not intended to be the final remedy for this property. Additional remedial measures will be specified in subsequent Records of Decision which may affect the remedy selected in this Record of Decision.

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EPA/ROD/R06-88/037
June 1988

PB89-225528

EPA

Superfund Record of Decision:

South Valley/Edmunds Street, NM

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NATIONAL TECHNICAL INFORMATION SERVICE
SPRINGFIELD, VA. 22161

DECLARATION

The remedy described above is protective of human health and the environment, attains applicable or relevant and appropriate Federal and State requirements and is cost-effective compared to equally protective alternatives. This remedy satisfies the preference for treatment that reduces toxicity, mobility or volume as a principle element. Finally, it is determined that this solution utilizes permanent solutions and alternative technologies to the maximum extent practicable.

The State of New Mexico has been consulted on the selection of remedy for the South Valley Edmunds Street Groundwater Operable Unit and the concurrence of the New Mexico Environmental Improvement Division has been requested.

6-28-88
Date

Robert E. Layton Jr., P.E.,
Regional Administrator

Edmunds Street Groundwater Operable Unit
South Valley Site
Record of Decision Concurrences

The Edmunds Street Groundwater Operable Unit Record of Decision has been reviewed and I concur:

Allyn M. Davis, Director
Hazardous Waste Management Division (6H)

Robert E. Hannesschlager, P.E., Chief
Superfund Enforcement Branch (6H-E)

Larry D. Wright, Chief
Superfund Enforcement Section (6H-EE)

Bennett Stokes
Office of Regional Counsel (6C-H)

Timothy K. Underwood
RPM, Superfund Enforcement Section (6H-EE)

SUMMARY OF REMEDIAL ALTERNATIVE SELECTION

South Valley, Albuquerque, New Mexico
Edmunds Street Groundwater Operable Unit

Site Location and Description

The Edmunds Street property is a portion of the South Valley Superfund site in Albuquerque, New Mexico. The South Valley Superfund site is an area surrounding the City of Albuquerque Municipal Water Well known as San Jose 6, near the intersection of Broadway and Woodward Road in southern Albuquerque. The Edmunds Street property is located at 3301 Edmunds Street. Figure 1 below shows the larger South Valley site with the Edmunds Street property in the southeastern corner of the site. Figure 2 on the next page shows the Edmunds Street property in more detail.

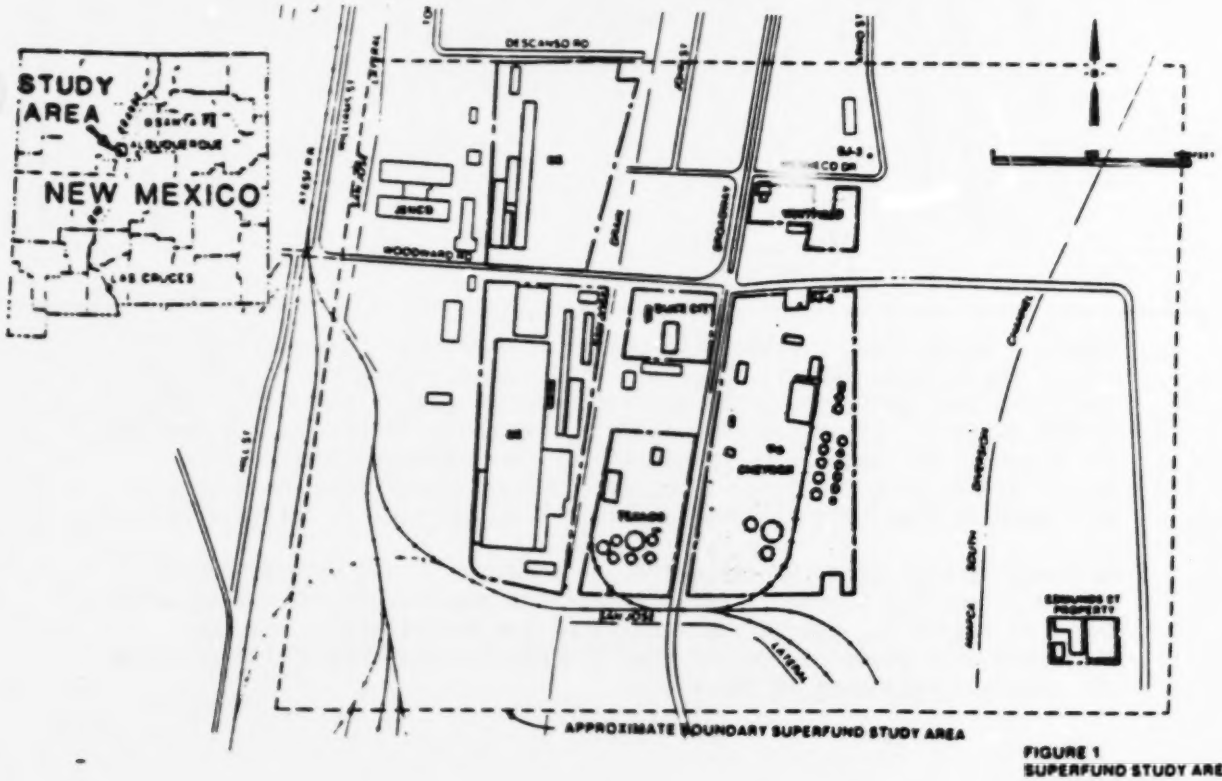


FIGURE 1
SUPERFUND STUDY AREA
SJ 6 SUPERFUND SITE

FIGURE 2. LOCATIONS OF MONITORING WELLS AND SUPPLY WELLS
3301 EDMUNDS STREET PROPERTY

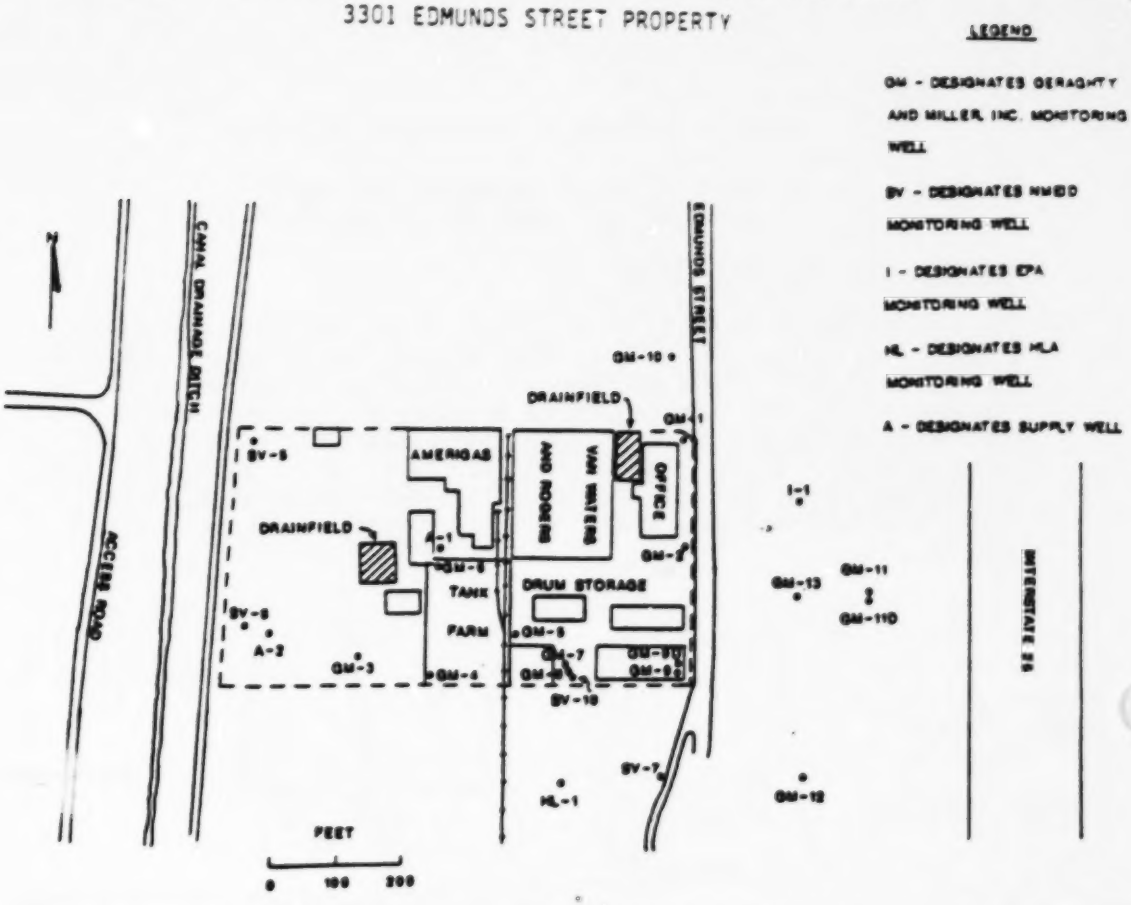


Figure 2 above shows the various potential sources of contamination within the Edmunds Street property. This document concerns only one of them, the area surrounding the monitoring well labeled SV-10. The area around SV-10 is called the drainage pit area. This area is a low spot on the property and much of the drainage for the property flows to this spot. Significant levels of industrial solvents have been found when soil samples from this drainage pit have been analysed in laboratories.

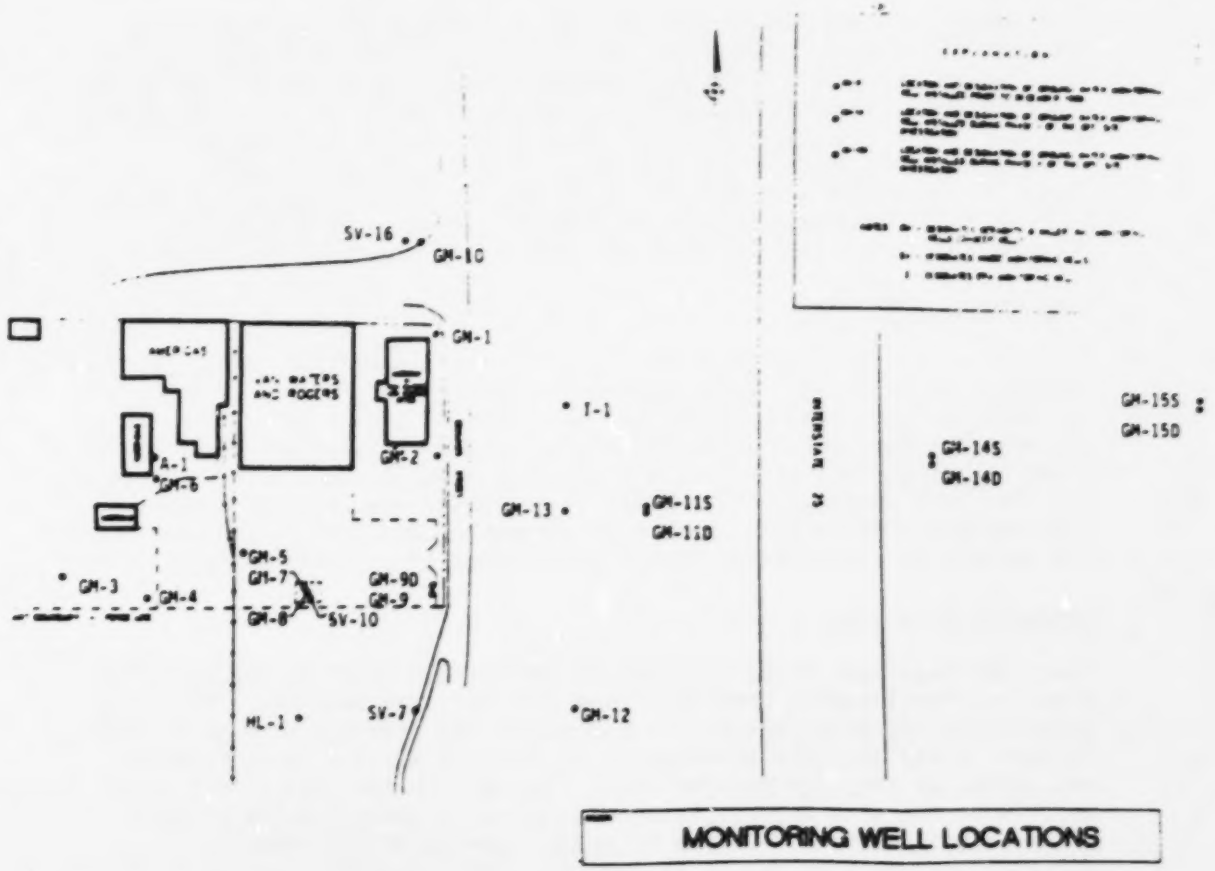
An investigation into the contamination problems at the Edmunds Street property resulted in the installation of the groundwater monitoring wells shown in Figure 2. One of the results of the investigation was the discovery of a plume of contaminated groundwater starting at the drainage pit area and extending to the east.

The drainage pit itself, other potential sources of contamination within the Edmunds Street property, and groundwater contamination in other areas will be handled through later decision documents. This is only the first phase of remediation for the Edmunds Street property. The selected remedy may be incorporated into or superceeded by the remedy for source control and groundwater remediation made in the subsequent Record of Decision for this property.

Current Site Status

After the existence of the plume of contaminated groundwater was discovered, a separate investigation was launched to discover the nature and extent of the groundwater plume. As the more detailed map in Figure 3 shows, additional groundwater monitoring wells were drilled along the

Figure 3



eastward path of the groundwater plume to define its boundaries. Water samples were taken from the wells and analyzed to determine what chemicals were present and at what levels.

Table 1 shows the contaminants that were found in the groundwater monitoring well samples and the levels at which they were detected. As can be seen from the Table, most of the contaminants found were industrial solvents. As this data shows, the concentration of the contaminants falls as the plume moves to the east. The major concern at the moment is the threat to the water supply for the City of Albuquerque. Major wells fields that produce water for the City are in the migration pathway of the contaminant plume. The nearest well in the migration pathway is Miles Well #1, less than one mile to the northeast.

Site Risks

This Record of Decision is concerned with a single contaminated media, groundwater. It is, therefore, the groundwater route of exposure which is of greatest concern. Table 1 presents those contaminants found in the groundwater. There are no current groundwater users for the contaminated water in the contaminant plume of concern, but there is a City of Albuquerque water supply well in the path of the plume migration. The level of contaminants appears to be to low for toxic effects, but there is risk associated with chronic carcinogenic effects of 2×10^{-2}. Attachment 1 shows the calculations involved in reaching this number.

Enforcement Analysis

There is a list of several potentially responsible parties (PRPs) for the property on which this groundwater contamination originates. These include past and present owners and operators of the property. The primary PRPs for the purposes of this document are Van Waters and Rodgers, the current operator, and AmeriGas, the property owner. These two PRPs have expressed willingness to implement the selected remedy. Negotiations will be conducted in an attempt to memorialize agreement for PRP conduct of the Remedial Action under terms of a Consent Order.

Community Relations

There has been some media interest in the overall South Valley Superfund site, but the interest from individual citizens has been low. Notice to potentially affected persons and the public was provided through a press release on May 10, 1988 accompanied by a direct mailing to individuals and groups on the site mailing list. The mailing included a fact sheet describing the site problem, alternatives for cleanup and the proposed plan for remediation. The public comment period on the remedial alternatives ran from May 16 to June 17, 1988. A public meeting on remedy selection was held in Albuquerque on May 26, 1988. The response

VOLATILE ORGANIC CONTAMINANTS

TABLE ONE

Parameter in microgram per liter	Monitoring Well								
	GM-1	GM-2	GM-7	GM-8	GM-9	GM-9D	GM-10	GM-11	GM-11D
Carbon Tetrachloride	4.1	4.2	-	-	-	-	-	-	-
Chloroform	7.7	22	-	-	-	-	19	3.5	-
1,2 Dichloroethane	26	-	-	-	-	-	130	-	22
Trans-1,2 Dichloroethene	-	1.6	-	-	-	-	-	3.4	-
1,1 Dichloroethene	8.3	140	-	58	910	-	-	110	-
Methylene Chloride	-	-	-	-	440	-	-	-	-
Tetrachloroethene	51	420	-	760	4400	-	38	360	-
1,1,1-Trichloroethane	-	73	-	200	1000	-	-	38	-
Trichloroethene	-	170	-	210	1400	-	10	110	-
Acetone	-	-	-	250	15000	77	-	8.2	-

September 1987, Sampling Episode Data from the report "Feasibility Study for Plume Stabilization and Extracted Ground-Water At 3301 Edmunds Street, Albuquerque, New Mexico."

VOLATILE ORGANIC CONTAMINANTS

TABLE ONE (con't)

Parameter in microgram per liter	Monitoring Well		
	GM-12	GM-13	I-1
Carbon Tetrachloride	-	-	-
Chloroform	-	-	7.5
1,2 Dichloroethane	-	-	30
Trans-1,2 Dichloroethene	-	10	3.4
1,1 Dichloroethene	-	85	16
Methylene Chloride	5.8	-	-
Tetrachloroethene	-	450	150
1,1,1-Trichloroethane	-	-	7.9
Trichloroethene	-	120	37
Acetone	-	-	-

to significant comments or criticisms submitted during the public meeting and during the comment period are presented in the Responsiveness Summary at the end of this document.

Operable Units

The South Valley site has been divided into four operable units. These are Edmunds Street Groundwater, Edmunds Street Source Control, Air Force/GE Source Control, and the overall Offsite portion. The division of the site into these parts follows from the nature of the site. The South Valley site is a large area surrounding the City well San Jose #6. Within this larger area are a number of industrial properties owned and operated by different groups and individuals. Each of the two source control operable units will deal with a single industrial property that through the investigation process has been shown to have contamination that needs to be corrected. The overall Offsite operable unit is intended to deal with the site as a whole, leading to a decision about the larger groundwater problem that caused this area to become a Superfund site, while the source control operable units eliminate the sources of groundwater contamination.

The fourth operable unit, the Edmunds Groundwater operable unit which is the subject of this document, deals with a specific problem which does not appear to directly affect the larger South Valley problem. The Edmunds groundwater problem does start within the Edmunds Street property, however, and needs to be dealt with during resolution of the greater South Valley Superfund site problems. The overall Offsite operable unit and the two source control operable units should be resolved within three months, following completion of reports detailing additional investigations in the individual industrial properties and the overall site.

Alternatives Evaluation

The alternatives seek to eliminate the single route of contamination of issue for this Record of Decision, groundwater. The source of the contamination will be handled through a separate decision document. As stated in the Declaration, this is only a first action concerning this property and is not the final groundwater related remedial action.

This decision will be limited to the specific groundwater plume moving to the east as previously described. Any other groundwater contamination originating from the same source will be considered in a separate document. The groundwater source in question, the Santa Fe formation will be treated as a sole source aquifer. It is the source for drinking water for the City of Albuquerque and no alternate source is available. The Santa Fe Formation consists of unconsolidated sands, gravels, silts and clays to an approximate 2000 foot depth. The contaminant plume appears to be currently contained above a lower permeability layer found at approximately 180 feet in depth. However, in borings farther in the direction of migration, the lower permeability layer cannot be found. One purpose of this effort will be to halt migration of the plume before it moves beyond the lower permeability layer and deeper into the aquifer. The contaminant plume poses a direct threat to the water supply for the City of Albuquerque. The contaminant plume is moving toward the City well fields, with well Miles #1 the nearest well

threatened. Time for implementation is short. Theoretical calculations show that the contaminants could have already reached Miles #1, though sampling of the well shows that it has not yet been contaminated.

Of the decision elements listed above, time poses the greatest constraints on the selection of remedy. Any remedy selected will have to halt migration of the contaminant plume within a very short period of time. Given the constraints just discussed, the screening process rapidly eliminated in-situ treatment as an option as it would involve too long a period of implementation. Extraction and treatment remained as the only viable alternative.

Alternatives

Each alternative was evaluated on the following criteria:

1. Short-term effectiveness: Protection of human health and the environment during construction and implementation.

2. Long-term effectiveness and permanence: Effectiveness after construction and implementation is complete.

3. Reduction of toxicity, mobility, or volume: Anticipated performance of the specified treatment technologies,

4. Implementability: Technical and administrative feasibility of alternatives and the availability of required resources.

5. Cost: Cost of construction and operation and maintenance.

6. Compliance with ARARs: Compliance with applicable or relevant and appropriate standards (abbreviated as ARARs) from existing laws and regulations. These are standards or regulations that either do apply or at least should be considered when looking at an alternative.

7. Overall protection of human health and environment: How the alternative as a whole protects and maintains protection of human health and the environment.

8. State acceptance: The State's preferences or concerns about the alternatives.

9. Community acceptance: The community's preferences or concerns about the alternatives.

All of the alternatives with the exception of no action require the extraction and treatment of the contaminated groundwater to existing standards. This automatically meets the requirements for both short

and long-term effectiveness and permanence. The water will be treated to ARAR standards meeting the criteria for reduction of toxicity, mobility, and volume and compliance with ARARs through the removal of the contaminants from the groundwater. This reduces the comparison of the alternatives to implementability, cost, overall protection and State and Community acceptance criteria.

The basic alternatives and their components are:

1. No Action: No action would be taken. The site would remain in its current condition. The plume of contaminated groundwater would continue to migrate toward the City of Albuquerque wells.

2. Recovery: All of these alternatives involve the extraction of groundwater through pumping wells screened in the portion of the aquifer contaminated. The extraction wells are planned to be 8-inch diameter wells with steel casing having stainless steel screens. The screens will be positioned in the upper portion of the aquifer to recover the contaminated groundwater. Preliminary design calls for wells capable of yielding 50 to 100 gallons per minute (gpm). The pumping system will be designed with sufficient wells and pumping capacity to recover the contaminated groundwater coming from the Edmunds Street property above the limits deemed necessary to protect human health and the environment. These limits are discussed more fully in the Statuatory Determinations Section of this summary.

Preliminary designs indicate that two wells located north and south of the monitoring well cluster GM11 should be sufficient when pumping at a combined rate of 75 gpm. Actual rates of pumping and the adequacy of two wells will be determined during remedial design and once the system is in place and its performance can be monitored.

2-A. Groundwater Extraction Well System: This option would use pumping wells alone to contain and recover the contaminated groundwater.

2-B. Well System and Partial Slurry Wall: This option would combine a pumping well system with a slurry wall in front of the migrating plume slowing further migration.

2-C. Well System and Complete Slurry Wall: This option would combine a pumping well system and a slurry wall that completely surrounded the area of contaminated groundwater.

3. Treatment of Contaminated Groundwater: Once the contaminated groundwater was recovered it would be treated by one of the following methods.

3-A. Treatment with Packed Column Aeration.

3-B. Treatment with Carbon Adsorption.

3-C. Treatment at a Publically Owned Treatment Works (POTW).

4. Discharge: Once the water has been treated, the treated water must be handled. Two options were examined.

4-A. Surface discharge.

4-B. Restoration of water to the aquifer through infiltration galleries.

Comparative Analysis of Alternatives

The following is a description of the analysis of the various alternatives using the remaining criteria for comparison.

	Implement-ability	Cost	Overall Protection	State Acceptance	Community Acceptance
1	+	+	-	-	-
2-A	+	+	+	+	+
2-B	-	-	+	+	+
2-C	-	-	+	+	+
3-A	+	+	+	+	+
3-B	+	-	+	+	+
3-C	-	+	+	-	-
4-A	+	+	+	-	-
4-B	+	-	+	+	+

+ being a favorable evaluation
- being a negative evaluation

Implementability - All of the options use proven readily available techniques. The slurry wall options (2-B and C) face difficulties due to the presence of an interstate highway and a petroleum pipeline in the area of construction as well as doubts about construction at 180 foot plus depths. The City POTW desires to reserve its available treatment capacity, therefore the use of its plants for the POTW treatment option (3-C) was eliminated.

Cost - Using a 10 year project life, a cost comparison was developed for each of the three parts of the alternatives: extraction, treatment, and discharge. More extensive cost information is presented in Attachment 2. All the extraction options involve pumping wells and a collection system estimated at $615,000. A partial slurry wall would cost $1,923,336. Costs for a full slurry wall could not be developed as engineering costs for design and construction could not be estimated. Packed tower aeration

was estimated to cost $205,200. Carbon Adsorption was estimated at $708,500 mainly due to higher operation and maintenance costs. Discharge of the treated water to the surface was estimated at $27,000. Using infiltration galleries was estimated at $54,000.

Overall Protection - No action offers no protection. Packed tower aeration and carbon adsorption both would treat to the same groundwater standards. The air release associated with packed tower aeration poses no estimated health threats. The threat of the contaminated carbon from carbon adsorption varies depending on the method of disposing of the spent carbon. Discharged water would be of similar quality in either discharge method.

State and Community Acceptance - Preservation of useable water is preferred giving infiltration a higher level of acceptance than discharge to the surface. Infiltration would also eliminate concerns of downstream users of surface waters.

Selected Remedy

The selected remedy consists of the following parts: containment and collection of the contaminated groundwater through the use of an extraction well system, treatment of the recovered groundwater through packed tower aeration, and return of the treated water to the aquifer through infiltration galleries.

The risk level attained at completion of the response action is discussed in the following Statutory Determinations section.

No action was rejected as it did nothing to mitigate the potential impacts of the contaminated groundwater. Of the collection options, pumping alone was selected since a system of pumping wells alone is capable of containing and recovering the contaminated groundwater. This eliminates the need for construction of slurry walls with the associated risks of exposure during construction and implementation difficulties. Packed tower aeration was selected for the treatment method due to greater ease of operation and lower operation and maintenance costs over carbon adsorption. Reinfiltration of the treated water was chosen over surface discharge due to a desire to preserve the water that could be lost through evaporation during surface discharge and the beneficial effects of recycling the treated water through the contaminated area of the aquifer. The additional benefits include the flushing action of the recycled water and the containment and retreatment of any water exiting the treatment system above standards for cleanup.

Statutory Determinations

Under Section 121 of CERCLA, the selected remedy must satisfy certain statutory requirements specified within that section. This section will discuss each of these requirements one at a time. The selected remedy must:

1. Be protective of human health and the environment.

2. Attain ARARs

3. Be cost-effective

4. Utilize permanent solutions and alternative treatment technologies or resource recovery technologies to the maximum extent practicable.

5. Address whether the preference for treatment that reduces toxicity, mobility, or volume as a principle element is satisfied.

The first statutory requirement, that the selected remedy be protective of human health and the environment can be examined through examination of the two pathways for exposure, ingestion of contaminated groundwater and inhalation of volatilized contaminants. The first of these will be addressed through the goals for treatment of the contaminated groundwater. The treatment goals will be based primarily on two criteria, maximum contaminant levels (MCLs) developed under the Safe Drinking Act and the State of New Mexico Water Quality Control Commission (NMWQCC) Regulations for discharges onto or below the surface of the ground whichever of the two is more stringent. These goals are given in Table 2.

TABLE 2

Contaminant	Cleanup Goal in part-per-billion	*Regulation
Carbon Tetrachloride	5	MCL
Chloroform	100	NMWQCC
1,2 Dichloroethane	5	MCL
Trans-1,2 Dichloroethene	70**	MCLG
1,1 Dichloroethene	5	NMWQCC
Methylene Chloride	100	NMWQCC
Tetrachloroethene	20	NMWQCC
1,1,1-Trichloroethane	60	NMWQCC
Trichloroethene	5	MCL
Acetone	-	-

* MCL - for the maximum contaminant under the Safe Drinking Water Act
NMWQCC - for the New Mexico discharge regulations
** This standard is a maximum contaminant limit goal (MCLG)

This leads directly to the discussion of applicable or relevant and appropriate requirements (ARARs), the second statutory determination. The two regulations mentioned above are the primary standards involved for groundwater. There is a third NMWQCC standard that may apply. It is General Provision 1-101.UU which calls for control of "toxic pollutant"(s) which would create a lifetime cancer risk of more than one cancer per 100,000 exposed persons. Attachment 1 shows the lifetime cancer risk posed by contaminants detected in the contaminated groundwater. Attachment 1 also indicates those contaminants which are included in the NMWQCC list of toxic pollutants. Water being reinfiltrated will need to meet this standard. In addition to these groundwater regulations, the use of packed tower aeration also involved compliance with air regulations. Air dispersion modeling using two EPA certified models, ISC and Valley, was done to determine air impacts. There appears to be no significant health impacts associated with use of packed tower aeration. Calculations of these impacts are shown in Attachment 3. The two air ARARs most applicable are the Clean Air Act and the Ambient Air Quality Standards and Air Quality Control Regulations for Albuquerque/Bernalillo County. The emission rate from the packed tower aeration system is well below the regulated rates from both of these sets of air regulations. The calculations are shown in Attachment 4. A full list of all ARARs considered can be found in Attachment 5.

The third criteria, cost effectiveness, is met by the selected remedy. Packed tower aeration is the most cost effective of the treatment methods which are protective of human health. The fourth criteria, permanence, can be related to the recovery and treatment of the contaminated groundwater. The selected remedy will restore the contaminated water to a fully useable condition and the will restore the treated water to the aquifer.

The final criteria is the preference for treatment that reduces toxicity, mobility, or volume as a principle element. The selected remedy stops migration of the contaminated groundwater plume and treats the contaminated groundwater to reduce its toxicity. This eliminates the primary route of exposure to the public. The air exposure associated with the selected remedy has been examined and appears to pose no significant threat to human health.

Significant Changes in the Selected Alternative

There was no change in the recommended alternative presented to the public during the public comment period and at the public meeting and that recommended alternative is the selected remedy.

3301 EDMUNDS STREET
SOUTH VALLEY SUPERFUND SITE
COMMUNITY RELATIONS RESPONSIVENESS SUMMARY

This Community Relations Responsiveness Summary has been prepared to provide written responses to comments submitted regarding the proposed plan of action at 3301 Edmunds Street, South Valley hazardous waste site. The summary is divided into two sections:

Section I: Background of Community Involvement and Concerns. This section provides a brief history of community interest and concerns raised during the remedial planning activities at South Valley.

Section II: Summary of Major Comments Received. The comments (both oral and written) are summarized and EPA's responses are provided.

I. Background of Community Involvement

Due to the possibility of contamination of the entire San Jose Wellfield, the South Valley site has received extensive media attention. However, because of the heavily industrialized nature of the site area and the lack of exposure, citizen concern has been very limited.

Although no citizen groups have been formed to deal specifically with the problems posed by the South Valley site, several groups have expressed a general interest regarding overall environmental concerns in the Albuquerque area. No specific interest has been noted involving the Edmunds Street property.

II. Summary of Major Comments Received

The press release and Proposed Plan fact sheet announcing the public comment period and public meeting were distributed on May 10, 1988. The comment period began on May 16, 1988 and was extended until June 17, 1988. A public meeting was held for the area residents and local officials on May 26, 1988 at the Radisson Hotel. The purpose of this meeting was to explain the results of the remedial investigation and to outline the various alternatives presented in the feasibility study. Approximately 43 people from the area attended the meeting, and 5 residents made oral statements or asked questions. No written comments or questions were received.

Overall, the residents and local officials do not oppose the proposed remedy. During the public comment period, there were comments/questions regarding the following:

Question 1: What about contamination outside the area described in this operable unit?

Response: This is only the first of several operable units. There will be future meetings and comment periods on other portions of the larger South Valley site. Results of other remedial investigations and cleanup plans will be available to the public in the next few months. Those who attended the public meeting and registered or made comments during the public comment period were added to the mailing list and will receive individual notices concerning these additional operable units.

Question 2: Do you [EPA] have a list of the compounds that you have identified as contaminants in the area?

Response: Yes, the list is included in the reports at the public repositories, specifically in Table 1 of "Feasibility Study for Plume Stabilization and Extracted Ground-Water At 3301 Edmunds Street, Albuquerque, New Mexico."

Question 3: Do you have any preliminary technical data involving the efficiency of the two proposed methods, the air stripping process or carbon adsorption?

Response: Yes, there is information available through the USEPA Office of Drinking Water on the efficiency of air stripping for the majority of compounds that we found at the site. No individual studies were done using waste from this site. Once the cleanup decision is made, such a study will be performed as a part of the design process.

Question 4: Are copies of the remedial investigation and feasibility study available?

Response: Yes, they are available at the four repositories in New Mexico which are listed in the fact sheet and at the EPA offices in Dallas.

Question 5: The estimate for cleanup time in the proposed plan was five years. Is this a realistic estimate?

Response: The five year time is a minimum. Groundwater contamination generally takes a long time to clean up. EPA does not wish to understate the cleanup time.

Question 6: Availability of the documents seems to be a problem, particularly at the Albuquerque Public Library. Is this the only repository?

Response: No, there are two others in Albuquerque, the University of New Mexico Library, and the City County Building. A check will be made at the Albuquerque Public Library to see if there was a problem in availability of the documents.

Question 7: Are there any contaminants that would not be removed that are found on the Edmunds Street properties?

Response: No. It is a requirement that all of the contaminants that are found in the groundwater be removed to levels that are below those set by the Safe Drinking Water Act or the New Mexico Water Control Commission Regulations.

Question 8: This method [the air stripping method] would release contaminants into the air. Is there any data available to the public on the estimated amount of contamination to be released?

Response: Yes. One of the documents in the public repositories titled, "Air Dispersion Modeling Analysis For A Packed Aeration Column, Van Waters & Rogers, Inc., Edmunds Street Site, Albuquerque, New Mexico" involves an air model that was used to predict the levels of contamination that could be expected if the air stripping method is used.

Question 9: Will you also be monitoring air quality if that method [air stripping] is used?

Response: Yes, we would not use the air stripping method unless we could monitor for air quality. Regular air monitoring will be required to ensure that the air stripping method is operating properly.

Question 10: Given the fact that the City of Albuquerque is under sanction for violations of the Clean Air Act, has the proposal for air stripping been cleared through the City?

Response: The City is under sanction for violations of the carbon monoxide standards. The contaminants associated with this cleanup would have no effect on this situation. Use of the air stripper falls within the standards set by the Albuquerque/Bernalillo County air regulations and the Clean Air Act.

Question 11: Did you consider the cumulative effects of operating the air stripper?

Response: Yes, we examined both the short-term effects and long-term effects of air releases during use of the stripper and found that they would not pose a health threat either to workers onsite or nearby residents.

ATTACHMENT ONE

CARINOGENIC RISK FROM
CHRONIC EXPOSURE TO CONTAMINATED GROUNDWATER

Carcinogenic Risk From Chronic Exposure to Contaminated Groundwater

The following calculations involve the use of certain standard assumptions. These assumptions include the following: Consumption of 2 liters of water a day for 70 years at a body weight of 70 kilograms. The values used for the concentrations of contaminants are a combination of values for two wells. Most of the concentrations come from a sample from monitoring well GM-9, the monitoring well within the plume having the highest level of contamination. However, this well does not contain all of the contaminants of concern. For those that did not appear in the sample from GM-9, values were taken from a sample for well GM-1.

The calculations were done as follows:

$$\frac{\text{concentration of contaminant (part per million)} \times \frac{2 \text{ liters}}{\text{day}} \times \text{cancer potency factor}}{\text{70 kilograms body weight}} = \text{increased lifetime cancer risk}$$

It should be noted that there are no cancer potency factors for trans 1,2 dichloroethene, 1,1,1 trichloroethane, or acetone.

Contaminant	Concentration (part per billion)	Cancer Potency Factor	Risk
Chloroform	7.7	8.1 x 10-2	1.8 x 10-5
1,2 Dichloroethane	26	9.1 x 10-2	6.8 x 10-5
1,1 Dichloroethene	910	0.6	1.6 x 10-2
Methylene Chloride	440	7.5 x 10-3	9.4 x 10-5
Tetrachloroethene	4400	5.1 x 10-2	6.4 x 10-3
Trichloroethene	1400	1.1 x 10-2	4.4 x 10-4
		total	2.3 x 10-2

ATTACHMENT 2

COST ESTIMATES

Cost Estimates

The cost estimates below were calculated assuming that installation costs would be 1.5 times the capital costs, that engineering costs would be twenty percent of the capital costs, that the project would have a ten year life and the calculations used a 7% discounted rate.

Extraction wells and pumps

capital costs	50,000		
pipelines	100,000		
installation & engineering	255,000		
operation & maintenance			
materials & power at 15,000/year			
labor at 15,000/year	210,000	total	615,600

Partial Slurry Wall

capital costs	1,680,000		
engineering	336,000		
savings from reduced pumping	-92,664	total	1,923,000

Complete Slurry Wall

No calculation was done for this option. The figure for the partial slurry wall can be used as a minimum. In addition to those costs would be an unknown additional cost for further investigation of the confining layer into which the wall would be based and subsequent greater extent of the slurry wall.

Packed Aeration Column

capital costs	50,000		
operation and maintenance	70,200		
installation and engineering	85,000	total	205,200

Carbon Adsorption Unit

capital costs	150,000		
sand filters	50,000		
installaiton and engineering	340,000		
operation and maintenance at 24,000/year	240,000	total	780,000

Surface Discharge

pipe	10,000		
installation and engineering	17,000	total	27,000

Infiltration Galleries

capital costs	20,000		
installation and engineering	34,000	total	54,000

ATTACHMENT 3

Health Impacts From Packed Tower Aeration

The calculations that follow on the health impacts of packed tower aeration are based on the air dispersion modeling detailed in the report entitled, "Air Dispersion Modeling Analysis for a Packed Aeration Column, Van Water and Rogers, Inc., Edmunds Street Site, Albuquerque, New Mexico." Three models were used in this report. The calculations below are based on the one known as Valley, the more conservative of the models for complex terrain. In addition, two conservative assumptions were made. The first involved the quality of the water entering the column. The level of contaminants in the incoming water is expected to rise for approximately two years and to then begin to decline. The peak predicted contaminant values were used for the calculation even though this condition will be short-lived. The second conservative assumption involved the use of summer inversion meterological conditions. This is the worse case for valley conditions and was used even though this condition will not occur for most of the year. Finally, the values used to calculate exposures for the two nearest residential areas came from points between the proposed tower location and the residential area. This gives higher levels than would occur at the actual locations. The Kirtland Addition is 1500 meters north/northeast of the column location so the 1373 meter value was used. The houses along Wesmeco are 850 meters northwest of the site, so the 686 meter value was used. The Table that follows shows that even with these combined conservative conditions, the risk posed by the aeration column is very small.

RISK CALCULATIONS FOR AIR

Contaminant	Maximum Concentration in Water	Unit Concentration Wesmeco Blvd.	Unit Concentration Kirtland Addition	Contaminant Concentrations (mg/cubic meter) Wesmeco	Contaminant Concentrations (mg/cubic meter) Kirtland	Increased Carcinogenic Risk Wesmeco	Increased Carcinogenic Risk Kirtland
	ug/liter						
Kirtland							
benzene	5.1	0.72	5.84	2.3 x10-8	1.9 x10-7	2 x10-10	2 x10-9
chloroform	6.2			2.8 x10-8	2.3 x10-7	6 x10-10	5 x10-9
trans 1,2 dichloroethene	6.0			2.7 x10-8	2.2 x10-7	-	-
1,1 dichloroethene	193.6			8.7 x10-7	7.1 x10-6	3 x10-7	2 x10-6
tetrachloroethene	633.6			2.8 x10-6	2.3 x10-5	2 x10-9	1 x10-8
trichloroethene	193.6			8.7 x10-7	7.1 x10-6	3 x10-9	3 x10-8
1,1,1 trichloroethene	66.9			3.0 x10-7	2.4 x10-6	-	-
1,2 dichloroethane	66.9			3.0 x10-7	2.4 x10-6	8 x10-9	6 x10-8
acetone	16.7			7.5 x10-8	6.1 x10-7	-	-
total	1188.6						

- This indicates that no carcinogenic risk was calculated as no cancer potency factor was available.

ATTACHMENT 4

The Clean Air Act limits air emission from hydrocarbon sources to 100 tons per year. Using the estimated worst quality of water expected to enter the aeration column (1628 total micrograms per liter contaminants) and a 100 gallon per minute flow rate of water, the following calculation was performed for annual emissions:

$$\frac{8400\ \text{hours}}{\text{year}} \times \frac{4500\ \text{gallons}}{\text{hour}} \times \frac{1628\ \text{ug}}{\text{liter}} \times \frac{1\ \text{g.}}{10} \times \frac{1\ \text{lb.}}{454\ \text{g}} \times \frac{3.785\ \text{liter}}{\text{gallon}}$$

=513 pounds per year or 0.25 tons per year.

The Ambient Air Quality Standards and Air Quality Control Regulations for Albuquerque/Bernalillo County have a maximum concentration of 100 ug/m^3 in ambient air for non-methane hydrocarbons. The air modeling using the VALLEY model showed the maximum impact would occur north/northeast of the column at a distance of 229 meters.

Chemical	Concentration in micrograms per cubic meter	
	10.7 meter stack	13.7 meter stack
benzene	0.00076	0.00075
chloroform	0.00092	0.00091
trans-1,2 dichloroethene	0.00089	0.00088
1,1-dichloroethene	0.02886	0.02859
tetrachloroethene	0.09446	0.09355
1,1,1 trichloroethene	0.00997	0.00988
1,2 dichloroethane	0.00997	0.00988
acetone	0.00249	0.00247
totals	0.14832	0.14691

The total concentrations are well below the 100 ug/m^3 required under the Albuquerque/ Bernalillo County air regulations.

ATTACHMENT 5

INITIAL SCREENING OF POTENTIAL FEDERAL CHEMICAL-SPECIFIC ARAR'S
SOUTH VALLEY SJ-6 SUPERFUND SITE

Requirement	Prerequisites	Citation	Description	Applicable/Relevant and Appropriate	Comments
Safe Drinking Water Act (SDWA)		42 USC 300f			
National Primary Drinking Water Standards	Public Water System	40 CFR 141	Establishes health-based standards for public water systems (maximum contaminant levels (MCLs)).	Yes/--	Organic and inorganic contaminants have been detected at the study area.
National Secondary Drinking Water Standards	Public Water System	40 CFR 143	Establishes standards for the aesthetic qualities of public water systems (secondary MCLs (SMCLs)).	No/Yes	SMCLs are not federally enforceable but are intended as guidelines for the states.
Maximum Contaminant Level Goals	Public Water System	Public Law No. 99-339 100 Stat. 642 (1986)	Establishes maximum contaminant level goals (MCLGs) of no known or anticipated adverse health effects.	No/No	MCLGs are non enforceable requirements.
Clean Water Act (CWA)	Waters of the United States	33 USC 1251-1376	Objectives are to restore and maintain the chemical, physical, and biological integrity of the nation's waters.	No/No	There are no bodies of surface water on the site. (There are some man made drains; do not constitute bodies of surface water.
Water Quality Criteria		40 CFR 131			
Clean Air Act (CAA)					
National Primary and Secondary Ambient Air Quality Standards	Contamination of air affecting public health and welfare	40 CFR 50 42 USC 7401-7642)	Establishes standards for ambient air quality to protect public health and welfare (including standards for particulate matter and lead).	No/Yes	Air contamination is not anticipated to be a public health problem at this site.
Resource Conservation and Recovery Act (RCRA)	Uppermost aquifer underlying a waste management unit beyond the point of compliance	40 CFR 264.94	Owners/operators of RCRA treatment, storage, or disposal facilities must comply with conditions in the facility permit that are designed to ensure that hazardous constituents entering the groundwater from a regulated unit do not exceed the concentration limits under 264.94 in the uppermost aquifer underlying the waste management area beyond the point of compliance.	Yes/--	The specific properties at the SJ-6 site may be similar enough to these requirements to render them relevant and appropriate;

Note: -- = If a requirement is applicable, it cannot also be relevant and appropriate.

SPR159/1-1

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INITIAL SCREENING OF POTENTIAL FEDERAL LOCATION-SPECIFIC ARAR'S
SOUTH VALLEY SJ-6 SUPERFUND SITE

Requirement	Prerequisites	Citation	Description	Applicable/Relevant and Appropriate	Comments
Resource Conservation and Recovery Act (RCRA)	RCRA hazardous waste, treatment, storage, or disposal	40 CFR 264.18(a)	New treatment, storage, or disposal of hazardous waste prohibited within 61 meters of a fault displaced in Holocene time.	No/No	There are no known faults within 61 meters.
RCRA	RCRA hazardous waste, treatment, storage, or disposal	40 CFR 264.18(b)	Treatment, storage, or disposal facilities within the 100-year flood plain must be designed, constructed, operated, and maintained to prevent washout.	No/No	The site is not within the 100-year flood plain.
Executive Order on Flood Plains	Action that will occur in a flood plain (i.e., lowlands and relatively flat areas adjoining inland and coastal waters, and other flood-prone areas)	Executive Order 11988	Must take action to avoid or minimize potential harm to flood plains, and restore and preserve natural and beneficial values.	No/No	The site is not in a flood plain.
RCRA	Noncontainerized or bulk liquid hazardous waste	40 CFR 264.18(c)	The placement of any noncontainerized or bulk liquid hazardous waste in a salt dome formation, salt bed formation, underground mine, or cave is prohibited.	No/No	There are no salt dome formations, salt bed formations, underground mines, or caves onsite. Disposal in salt dome formations, mines, or caves is not contemplated for this project.
National Archaeological and Historical Preservation Act	Alteration of terrain that threatens significant scientific, prehistorical, historical, or archaeological data	[16 USC Section 469] 36 CFR 65	Must take action to recover and preserve artifacts.	No/No	There are no known scientific, prehistoric, historic, or archaeological artifacts onsite.
Fish and Wildlife Coordination Act	Diversion channeling or other activity that modifies a stream or river and affects fish or wildlife	[16 USC 661 et. seq.] 50 CFR 6.302	Must take action to protect fish or wildlife	No/No	There are no streams, rivers, or water bodies onsite.
Scenic Rivers Act	Activities that affect or may affect any of the rivers specified in Section 1276(a)	[16 USC 1271 et. seq. Section 7(a)] 40 CFR 6.302(a)	Must avoid taking or assisting in action that will have direct adverse affect on scenic river.	No/No	The nearest recreational river, the Rio Grande, is located approximately 1 mile west of the study area.

Note: -- = If a requirement is applicable, it cannot also be relevant and appropriate.

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(Continued)

Requirement	Prerequisites	Citation	Description	Applicable/Relevant and Appropriate	Comments
Coastal Zone Management Act	Activities affecting the coastal zone including lands thereunder and adjacent shorelands	(16 USC Section 1451 et. seq.)	Must conduct activities in a manner consistent with approved state management programs.	No/No	The study area is an inland site with no direct access to coastal lands.
Clean Water Act (CWA) Section 404	Oceans and waters of the United States	40 CFR, Subpart H	Action to dispose of dredge material into ocean waters is prohibited without a permit.	No/No	There are no bodies of surface water on the site.
Marine Protection Resources and Sanctuary Act, Section 103	Oceans and waters of the United States	(33 USC 1251-1376) 40 CFR 230, 231	Action to dispose of dredge material into ocean waters is prohibited without a permit.	No/No	There are no bodies of surface water on the site.
Historic Sites, Buildings, and Antiquities Act	Existence of natural landmarks	(16 USC 461-467)	Must avoid undesirable impacts upon landmarks.	No/No	There are no landmarks on the National Register of Natural Landmarks on the site.
Rivers and Harbors Act	Activities affecting navigation waters	(33 CFR 320-330) 33 USC 403	Substative requirements of Section 10 must be met if an alternative developed would involve structures or work in or affect navigable waters.	No/No	There are no navigable waters onsite.
National Historic Preservation Act, Section 106	Property included in or eligible for the National Register for Historic Places	(16 USC 470 et. seq.) 36 CFR 800	Must take action to preserve historic properties owned or controlled by federal agency. Must plan action to minimize harm to National Historic landmarks.	No/No	The site is not included in or eligible for the National Register of Historic Places.
Endangered Species Act of 1973	Critical habitat upon which endangered species or threatened species depends	(16 USC 1531 et. seq.) 50 CFR 200, 50 CFR 402	Must take action to conserve endangered species or threatened species.	No/No	The site is not a critical habitat upon which endangered species or threatened species depend.
Executive Order on Protection of Wetlands	Wetland as defined by Executive Order 11990, Section 7	Executive Order 11990 40 CFR Appendix 6	Must take action to minimize the destruction, loss, or degradation of wetlands.	No/No	The site is not a wetland as defined by Executive Order 11990, Section 7.

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SPDISS/1-3

(continued)

Requirement	Prerequisites	Citation	Description	Applicable/Relevant and Appropriate	Comments
Wilderness Act	Federally owned area described as a wilderness area	50 CFR 35.1 et. seq.	Area must be administered in such a manner that will leave it unimpaired as wilderness and to preserve its wilderness character.	No/No	The site is not a federally owned area described as a wilderness area.
National Wildlife Refuge System	Area designated as part of the National Wildlife Refuge System	50 CFR Part 27, (16 USC 668 d.d. et. seq.)	Only actions that are allowed under the provisions of 16 USC, Section dd(c) may be undertaken in areas that are part of the National Wildlife Refuge System.	No/No	The site . not designated as part of the National Wildlife Refuge System.

Note: -- = If a requirement is applicable, it cannot also be relevant and appropriate.

INITIAL SCREENING OF POTENTIAL FEDERAL ACTION-SPECIFIC ARARs
SOUTH VALLEY SJ-6 SUPERFUND SITE

Requirement	Prerequisites	Citation	Description	Applicable/Relevant and Appropriate	Comments
Solid Waste Disposal Act		(42 USC 6901-6987)			
Criteria for Classification of Solid Waste Disposal Facilities and Practices	Disposal of solid waste	40 CFR 257	Establishes criteria for use in determining which solid waste disposal facilities and practices pose a reasonable probability of adverse effects on health or the environment and, thereby, constitute prohibited open dumps.	No/Yes	However, the more stringent provisions of 40 CFR 260 supercede these criteria.
Hazardous Waste Management System: General	RCRA hazardous waste	40 CFR 260	Establishes procedures and criteria for modification or revocation of any provision in 40 CFR 260-265.	No/No	No modifications or revocations are needed; existing regulations will be used.
Identification and Listing of Hazardous Waste	Solid waste	40 CFR 261	Defines those solid wastes that are subject to regulation as hazardous wastes under 40 CFR 262-265, and 124, 270, and 271.	No/Yes	Are relevant and appropriate if any soil waste residues are generated as a result of treatment.
Standards Applicable to Generators of Hazardous Waste	Generation of RCRA hazardous waste	40 CFR 262	Establishes standards for generators of hazardous waste.	No/Yes	Are relevant and appropriate if there is hazardous solid or liquid residues from treatment plant.
Standards Applicable to Transporters of Hazardous Waste	Generation of RCRA hazard waste with offsite disposal	40 CFR 263	Establishes standards that apply to persons transporting hazardous waste within the U.S. if the transportation requires a manifest under 40 CFR 262.	Yes/--	Applicable if disposal of hazardous waste residues associated with treatment must be transported offsite.
Standards Applicable to Owners/Operators of Hazardous Waste Treatment, Storage and Disposal Facilities	RCRA hazardous waste	40 CFR 264	Establishes minimum national standards that define the acceptable management of hazardous waste for owners and operators of facilities that treat, store, or dispose of hazardous waste.	Yes/--	Applicable to treatment facility.
• General Facility Standards	Treatment, storage, or disposal of RCRA hazardous waste onsite	Subpart B	N/A	No/Yes	Are relevant and appropriate for onsite treatment facility.
• Preparedness and Prevention	Generation or treatment, storage, or disposal of RCRA hazardous waste onsite	Subpart C	N/A	No/Yes	Treatment facility needs a properly developed and implemented plan for worker safety.
• Contingency Plan and Emergency Procedures	Generation or treatment, storage, or disposal of RCRA hazardous waste onsite	Subpart D	N/A	No/Yes	Establishes normal safety plans and procedures.
• Manifest System Recordkeeping and Reporting	Generation or treatment, storage, or disposal of RCRA hazardous waste onsite	Subpart E	N/A	Yes/--	Are applicable if hazardous solid and liquid residues from treatment plant must be transported offsite.
• Releases from Solid Waste Management Units	Generation or treatment, storage, or disposal of RCRA hazardous waste onsite	Subpart F	N/A	No/Yes	Groundwater monitoring provisions are relevant and appropriate.
• Closure and Post-Closure	Generation or treatment, storage, or disposal of RCRA hazardous waste onsite	Subpart G	N/A	Yes/--	Portions of Subpart G that deal with post-closure activities are applicable.

Note: -- = If a requirement is applicable, it cannot also be relevant and appropriate.

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Requirement	Prerequisites	Citation	Description	Applicable/Relevant and Appropriate	Comments
• Financial Requirements	Generation or treatment, storage, or disposal of RCRA hazardous waste onsite	Subpart H	N/A	Yes/--	
• Use and Management of Containers	Management of RCRA hazardous waste in containers	Subpart I	N/A	Yes/--	Applicable for any containerized waste generated as a result of remedial construction.
• Tanks	Management of RCRA hazardous waste in tanks onsite	Subpart J	N/A	Yes/--	Same as Subpart I.
• Surface Impoundments	Management of RCRA hazardous waste in surface impoundments onsite	Subpart K	N/A	No/No	Surface impoundments are not being proposed for use at this site.
• Waste Piles	Management of RCRA hazardous waste in waste piles onsite	Subpart L	N/A	No/No	Waste piles are not being used at this site.
• Land Treatment	Land treatment of RCRA hazardous waste onsite	Subpart M	N/A	No/No	Land treatment is not being proposed for use at this site.
• Landfills	Landfilling of RCRA hazardous waste onsite	Subpart N	N/A	No/No	Onsite landfills are not being proposed at this site..
• Incinerators	Incineration of RCRA hazardous waste onsite	Subpart O	N/A	No/No	Onsite incineration is not being proposed as part of this study.
• Miscellaneous Units	Treatment, storage, or disposal of miscellaneous units	Subpart X		No/No	None are identified at this site.
Interim Standards for Owners and Operators of Hazardous Waste Treatment, Storage, and Disposal Facilities		40 CFR 265	Establishes minimum national standards that define the acceptable management of hazardous waste during the period of interim status and until certification of final closure or, if the facility is subject to postclosure requirements, until postclosure responsibilities are fulfilled.	No/No	This is not an interim-status facility.
Standards for the Management of Specific Hazardous Wastes and Specific Types of Hazardous Waste Management Facilities	Recyclable materials that are reclaimed to recover precious metals	40 CFR 266	Establishes requirements that apply to recyclable materials that are reclaimed to recover economically significant amounts of precious metals.	No/No	This is not a recycling facility to recover precious metals.
Interim Standards for Owners and Operators of New Hazardous Waste Land Disposal Facilities	New RCRA hazardous waste land disposal facility	40 CFR 267	Establishes minimum national standards that define acceptable management of hazardous waste for new land disposal facilities. Also establishes standards for underground injection of hazardous wastes.	No/No	A new hazardous waste land disposal facility is not being proposed. Underground injection of hazardous wastes is not contemplated.
Land Disposal Restrictions	Land disposal of RCRA hazardous waste onsite or offsite	40 CFR 268	Prohibits land disposal of specified untreated hazardous wastes and provides special requirements for handling such wastes.	No/No	No untreated wastes are contemplated for disposal.
Hazardous Waste Permit Program	RCRA hazardous waste treatment, storage, and disposal onsite	40 CFR 270	Establishes provisions covering basic EPA permitting requirements.	No/No	Permits are not required for onsite activities at Superfund sites.

Note: -- = If a requirement is applicable, it cannot also be relevant and appropriate.

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Requirement	Prerequisites	Citation	Description	Applicable/Relevant and Appropriate	Comments
Underground Storage Tanks (UST)	Underground storage tank	40 CFR 280	Establishes regulations related to underground storage tanks.	No/No	There are no underground storage tanks that are being addressed in this study.
Proposed Regulation for Control of emissions of volatile organics	Volatile organics emissions	53 FR 3748	Proposed standard would require 95% reduction of volatile organic emissions from Product Accumulator Vessel.	Yes/--	If a treatment plant is a product accumulator vessel.
Safe Drinking Water Act (SDWA)		(42 USC 300g)			
Underground Injection Control Regulations (UIC)	Underground injection of substances	40 CFR 144-147	Provides for protection of underground sources of drinking water.	No/No	Some portions of 40 CFR 144 would apply to the construction and operation of reinjection wells that would be used to enhance groundwater restoration.
Clean Water Act (CWA)		33 USC 1251-1376			
National Pollutant Discharge Elimination System	Discharge of pollutants from any point source into waters of the United States	40 CFR 122, 125	Requires permits for the discharge of pollutants from any point source into waters of the United States. Permits based on ambient water quality criteria.	Yes/--	Technology-based treatment requirements that are equivalent to best conventional control technology (BCT) or best available technology economically available (BAT) will be determined by EPA on a site-specific basis.
Effluent Limitations	Point source discharge into the Ore Mining and Dressing Point Source category	40 CFR 440	Sets technology-based effluent limitations for point source discharges in the Ore Mining and Dressing Point Source category.	No/No	No ore sources have been identified at the site.
National Pretreatment Standards	Pollutants that pass through or interfere with treatment processes in POTWs or that may contaminate sewage sludge.	40 CFR 403	Sets standards to control pollutants that pass through or interfere with treatment processes in POTWs or that may contaminate sewage sludge.	No/No	Discharge to the City of Albuquerque Sewage Treatment Plant is not considered because the nearby plant does not have adequate capacity.
Toxic Pollutant Effluent Standards	Aldrin/dieldrin, DDT, endrin, toxaphene, benzidene, PCBs	40 CFR 129	Establishes effluent standards or prohibitions for certain toxic pollutants.	Yes/--	If these contaminants exist within the study area.
Marine Protection Research and Sanctuaries Act	Ocean dumping	(33 USC 1401-1445)	Regulates ocean dumping.	No/No	Ocean dumping not part of any proposed alternatives.
Toxic Substances Control Act (TSCA)	PCBs	(15 USC 2601-2629) 40 CFR 761	Establishes storage and disposal requirements for PCBs.	No/No	PCBs not detected within study area.
Surface Mining Control and Reclamation Act (SMCRA)	Mining operations	(30 USC 1201-1328)	Establishes provisions designed to protect the environment from the effects of surface coal mining operations and, to a lesser extent, noncoal mining.	No/No	Study area is not a mining-related site.
Clean Air Act (CAA)		(42 USC 7401-7642)			
National Emission Standard for Hazardous Air Pollutants	Hazardous air pollutants	40 CFR 61	Sets emission standards for designated hazardous pollutants, including mercury, beryllium, and inorganic arsenic.	No/Yes	Some portions of 40 CFR 61 would be relevant and appropriate to off-gas emissions from air strippers.

Note: -- = If a requirement is applicable, it cannot also be relevant and appropriate.

(Continued)

Requirement	Prerequisites	Citation	Description	Applicable/Relevant and Appropriate	Comments
National Ambient Air Quality Criteria	Various air contaminants		Sets emission standards for designated air contaminants to protect the public health and welfare.	Yes/--	All proposed alternatives need to provide adequate level of workers protection during remediation.
New Source Performance Standards	New stationary source		Sets emission standards for certain classes of new stationary sources of air pollution.	Yes/--	If a certain class of new source is proposed as part of treatment plant.
Occupational Safety and Health Act (OSHA)	Remedial action workers	(29 USC 651-678)	Regulates worker health and safety.		
Federal Mine Safety and Health Act	Work in underground mines	30 USC 801-962	Regulates working conditions in underground mines to assure safety and health of workers.	No/No	Study area is not a mining-related site.
Hazardous Materials Transportation Act		(44 USC 1801-1813)			
Hazardous Materials Transportation Regulations	Transportation of hazardous materials	40 CFR 107, 171-177	Regulates transportation of hazardous materials.	Yes/--	If any alternative requires the offsite transportation of hazardous materials.

Note: -- = If a requirement is applicable, it cannot also be relevant and appropriate.

INITIAL SCREENING OF POTENTIAL STATE CHEMICAL-SPECIFIC ARAR'S
SOUTH VALLEY SJ-6 SUPERFUND SITE

Requirement	Prerequisites	Citation	Description	Applicable/Relevant and Appropriate	Comments
New Mexico Water Quality Act	Surface and subsurface within or bordering upon New Mexico.	New Mexico Statutes, Title 74 Article 6	This law creates the Water Quality Control Commission, which has the duties and powers to set water quality standards.		
New Mexico Water Quality Regulations Toxic Pollutant Criteria	Water contaminants; groundwater of <10,000 TDS.	1.101.U.U.	Regulates toxic pollutants "which are water contaminants ... which upon ingestion or assimilation will unreasonably threaten to injure human health, or the health of animals or plants ...."	Yes/--	Sets treatment standards for groundwater.

Note: -- = If a requirement is applicable, it cannot also be relevant and appropriate.

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INITIAL SCREENING OF POTENTIAL STATE ACTION-SPECIFIC ARAR'S
SOUTH VALLEY SJ-6 SUPERFUND SITE

Requirement	Prerequisites	Citation	Description	Applicable/Relevant and Appropriate	Comments
New Mexico Water Quality Act	Surface and subsurface within or bordering upon New Mexico.	New Mexico Statutes, Title 74, Article 6	Creates the water quality control commission, which has the duties and powers to set water quality standards and to regulate effluent to surface and subsurface waters.		
New Mexico Water Quality Regulations					
• Toxic Pollutant Criteria	Water contaminant(s) groundwater of <10,000 TDS. Effluent discharge to groundwater.	1-101.U.U.	Regulates toxic pollutants "which are water contaminants ... which upon ingestion or assimilation ... will unreasonably threaten to injure human health, or the health of animals or plants ...."	Yes/--	ARAR for reinjection of groundwater.
• General Requirements	Effluent discharge to a water course.	2-101.A	Sets limitations on BOD, COD, settleable solids, fecal coliform bacteria, and pH.	Yes/--	ARAR for point discharge to the Rio Grande.
• Rio Grande Basin--Community Sewerage System Requirements	Discharge to a water course in the Rio Grande Basin between the headwaters of Elephant Butte Reservoir and Angostura Diversion Dam.	2-102.A	Sets limitations on BOD, COD, settleable solids, fecal coliform bacteria, and pH.	Yes/--	The site is within this stretch of the Rio Grande. ARAR for point discharge to the Rio Grande.
• Regulations for Discharges onto or Below the Surface of the Ground	Discharge onto or below the surface of the ground.				
- Standards for Groundwater of 10,000 mg/l TDC Concentration or Less		3-103.A., B., C.	Sets human health standards, standards for domestic water supply, and standards for irrigation use for discharges to the groundwater.	Yes/--	ARAR for reinjection of groundwater.

Note: -- = If a requirement is applicable, it cannot also be relevant and appropriate.

SFB139/1-6

(continued)

Requirement	Prerequisites	Citation	Description	Applicable/Relevant and Appropriate	Comments
New Mexico Water Quality Standards	Surface waters of the State of New Mexico.		Designates uses for which the surface waters of New Mexico shall be protected and prescribes the water quality standards necessary to sustain the designated uses.		
o General Standards	Discharge of a toxic pollutant.	1-102	Outlines the requirements for discharges of toxic substances to surface waters suitable for recreation and support of desirable aquatic life presently common in New Mexico waters.	Yes/--	ARAR for point discharges to the Rio Grande.
o Stream Use Designation and Standards	Discharges to the main stem of the Rio Grande from the headwaters of Elephant Butte upstream to the Angostura Diversion work.	2-105	Sets standards for dissolved oxygen, pH, temperature, fecal coliform bacteria, TDS, sulfate, and chloride.	Yes/--	ARAR for point discharge to the Rio Grande.
New Mexico Air Quality Control Act					
New Mexico Air Quality Standards and Regulations	Discharge of particulates, sulfur dioxide, hydrogen sulfide, reduced sulfur, carbon monoxide, nitrogen dioxide, photochemical oxidants, and nonmethanol hydrocarbons to the air.	701	Sets standards for discharges of these criteria to the air.	Yes/--	ARAR for treatment effluent to the air.

Note: If a requirement is applicable, it cannot also be relevant and appropriate.

ATTACHMENT 6

STATE OF NEW MEXICO CONCURRENCE

NEW MEXICO
HEALTH AND ENVIRONMENT
DEPARTMENT

Post Office Box 968
Santa Fe, New Mexico 87504-0968

ENVIRONMENTAL IMPROVEMENT DIVISION

Michael J. Burkhart
Director

GARREY CARRUTHERS
Governor

LARRY GORDON
Secretary

CARLA L. MUTH
Deputy Secretary

JUN 29 PM 1:21
HAZARDOUS WASTE MGMT. DIV.

June 27, 1988

Allyn Davis, Director (6H)
Hazardous Waste Management Division
U.S. EPA, Region VI
1445 Ross Ave.
Dallas, TX 75202-2733

Dear Mr. Davis:

EID concurs with the remedy proposed by EPA for the Edmunds Street Groundwater Operable Unit of the South Valley Superfund site, with the understanding that this decision relates only to the plume of contaminated ground water that extends eastward from the 3301 Edmunds Street property in Albuquerque. Your staff has done excellent work on this project.

We stress that this operable unit concerns only a small part of the site and only a part of the Edmunds Street property. As we discussed with your staff on June 15, selection implementation of a comprehensive remedy for the South Valley site demands multi-agency coordination. EID trusts EPA, the lead agency for this site, to provide the necessary coordination and to work with the rest of us toward a viable remedy. EID also expects EPA to follow through with past commitments to define the extent of contamination by CERCLA wastes to the north and east, during remedial design if necessary.

Sincerely,

Kirkland L. Jones
Deputy Director

KLJ:lr

EQUAL OPPORTUNITY EMPLOYER

ATTACHMENT 7

ADMINISTRATIVE RECORD INDEX

not included.